

CLAIMS

1. A solid state battery comprising:

a substrate;

a power-generating element comprising a lower current collector layer, a lower electrode layer, an electrolyte layer, an upper electrode layer and an upper current collector layer laminated in this order on said substrate; and

a protective film covering at least side faces of said power-generating element,

wherein at least one portion of said protective film has a stepless smooth surface, said portion extending from an upper part covering an edge of said upper current collector layer to a lower end part contacting with said substrate, and an acute angle θ formed between the surface of said substrate and a shortest oblique line is not greater than 70 degrees, said oblique line extending from a point on said edge of said upper current collector layer to a point on the outer perimeter of the interface between said lower end part and said substrate.

2. The solid state battery in accordance with claim 1, wherein said protective film comprises at least one selected from the group consisting of silicon oxide, silicon nitride, silicon carbide, tantalum oxide, aluminum oxide, titanium oxide and a resin.

3. The solid state battery in accordance with claim

1, further comprising an electric lead connected to said power-generating element and disposed on said smooth surface of the protective film.